**Power BI Assignment 4**

1.Make a simple dashboard and show columns, bar charts, line charts, and area charts.

* Open Power BI Desktop.
* Import or connect to your data source.
* To create columns, use the Table or Matrix visual and select the columns you want to display.
* For a bar chart, select 'Bar Chart' from the visualization pane and choose the fields for Axis and Values.
* For a line chart, select 'Line Chart' and assign fields for Axis and Values.
* For an area chart, choose 'Area Chart' and assign appropriate fields

2.Make a simple dashboard and show combination chart, Scatter chart, Shape chart, and Treemap chart.

* Use the same steps as above to import data and create visuals.
* For a combination chart, use 'Combo Chart' and select different chart types for multiple data series.
* For a scatter chart, choose 'Scatter Chart' and assign fields for X-axis, Y-axis, and Size.
* Shape charts are not native to Power BI, but custom visualizations like 'Chiclet Slicer' can present data in a similar manner.
* For a treemap chart, select 'Treemap' and assign fields for Groups and Values.

3.Make a dashboard and show 2 maps visualization i.e. basic map and filler map

* Import geographical data or use existing data with location information.
* For a basic map, select 'Map' from the visualization pane and assign location-related fields like Country, State, or Latitude/Longitude.
* For a filled map, choose 'Filled Map' and assign fields for Location and Values to display data with color intensity based on geographic regions.

4.Create a report which has:

* Bar Chart:

1. Open Power BI Desktop.
2. Import or connect to your sales data source.
3. From the Fields pane, select a field that represents categories (e.g., Product Category) and a field for values (e.g., Sales Amount).
4. Click on 'Bar Chart' from the visualization pane to create a bar chart.
5. Drag the chosen fields into the Axis and Values sections of the bar chart visual to represent sales by category.

* Card Visualizations:

1. Click on the 'Card' visualization from the visualization pane.
2. Choose a measure (e.g., Total Sales, Average Sales, etc.) to display as a numeric value.

* Combo Chart Visualization:

1. Click on 'Combo Chart' from the visualization pane.
2. Select two different measures or fields to represent different chart types (e.g., Sales Amount and Quantity Sold).
3. Assign these measures to Line and Clustered Column chart types in the visual.

* Matrix Visualization:

1. Select the 'Matrix' visualization from the visualization pane.
2. Drag and drop fields such as Date (e.g., Year, Month) into the Rows or Columns area and a measure (e.g., Sales Amount) into the Values area to create a matrix-style table.

* Column Chart Visualization:

1. Click on 'Column Chart' from the visualization pane.
2. Choose a field (e.g., Region) for the X-axis and a measure (e.g., Sales Amount) for the Values to create a column chart.

5.Make a report to analyze product sales using treemap visualization.

* Data Import: Import or connect to your sales data source in Power BI Desktop.
* Treemap Visualization:

1. Click on 'Treemap' from the visualization pane.
2. Drag the field representing product categories (e.g., Product Category) into the Group section of the treemap.
3. Drag a measure representing sales (e.g., Sales Amount) into the Values section.

* Customize Treemap:

1. Resize and format the treemap visual as needed.
2. You can further enhance the visualization by adding additional fields to drill down, color saturation, or labels within the treemap.

* Save and View:

1. Save the report by clicking 'File' > 'Save' in Power BI Desktop.
2. View the report to analyze product sales distribution across different categories using the treemap visual.

6.Make a dashboard on sales data (Minimum 4 tiles).

* Create Tiles:

1. Design at least four visuals (e.g., charts, cards, tables) representing different aspects of sales data.
2. Use visuals like bar charts for sales by region, line charts for sales trends, cards for total sales, etc.

* Arrange Tiles on Dashboard:

1. Click on 'New Dashboard' from the left pane in Power BI.
2. Drag and drop the created visuals onto the dashboard canvas.
3. Arrange and resize the tiles to create an organized and meaningful dashboard layout.

* Customize Dashboard:

1. Add a title to the dashboard and provide descriptions or insights if necessary.
2. Set interactions between visuals to enable cross-filtering for an interactive user experience.

* Save and Share:

1. Save the dashboard by clicking 'File' > 'Save' in Power BI Desktop.
2. Share the dashboard with intended users by publishing it to Power BI Service or by exporting it as a file for sharing.